

WEST BRANCH
GRAND CALUMET RIVER BASIN
SEDIMENT SAMPLING PROJECT
EAST CHICAGO, INDIANA

FINAL
WASTE MANAGEMENT PLAN

October 2002
Revision 1

Prepared by

FOSTER  WHEELER
FOSTER WHEELER ENVIRONMENTAL CORPORATION

12100 NE 195th Street
Bothell, Washington 98011
(425) 482-7600
(425) 482-7652 (Fax)

Prepared for

U.S. Fish and Wildlife Service
Bloomington Field Office
620 South Walker Street
Bloomington, Indiana 47403

Under Contract to

United States Fish and Wildlife Service
Environmental and Facility Compliance Branch
P.O. Box 25207
7333 W. Jefferson Avenue, Suite 375
Denver, Colorado 80225-0207

Contract No.: FWS 1448-98695-98-C008
Task Order No. 02-Y037

TABLE OF CONTENTS

1.	INTRODUCTION	1-1
1.1	PROJECT DESCRIPTION	1-1
1.2	PROJECT WASTE DESCRIPTIONS	1-1
2.	REGULATORY DRIVERS AND GUIDANCE	2-1
3.	EXPECTED WASTE STREAMS AND QUANTITIES	3-1
3.1	CONTAMINANTS OF CONCERN	3-1
3.2	PPE AND MISCELLANEOUS DEBRIS	3-1
3.3	DECONTAMINATION WASTEWATERS	3-1
3.4	DECONTAMINATION SOLVENTS	3-3
3.5	EXCESS SEDIMENT SAMPLES	3-3
3.6	SPILL RESIDUES AND CLEAN UP MATERIALS	3-3
4.	REGULATORY REQUIREMENTS	4-1
4.1	WASTE CHARACTERIZATION	4-1
4.1.1	Listed Hazardous Waste Determination	4-1
4.1.2	Characteristic Hazardous Waste Determination	4-2
4.2	HAZARDOUS WASTE ACCUMULATION	4-2
4.3	HAZARDOUS WASTE STORAGE	4-3
4.4	CONTAINER LABELING	4-4
4.5	WASTE MANAGEMENT INSPECTION AND DOCUMENTATION PROGRAM	4-5
4.5.1	Inspections	4-5
4.5.2	Documentation	4-6
4.5.3	Waste Manifests and Land Disposal Restriction (LDR) Certification	4-6
4.6	WASTE TRANSPORTATION	4-7
4.7	WASTE DISPOSAL	4-10
4.8	WASTE MINIMIZATION	4-10
5.	UPDATING THE WASTE MANAGEMENT PLAN	5-1

TABLES

Table 3-1.	Project-specific Waste Stream Requirements	3-2
Table 4-1.	Non-Hazardous Waste Generator Requirements	4-5
Table 4-2.	Hazardous Waste Generator Requirements	4-8

ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
COC	contaminants of concern
DOT	Department of Transportation
EPA	U.S. Environmental Protection Agency
Foster Wheeler Environmental	Foster Wheeler Environmental Corporation
IAC	Indiana Administrative Code
IC	Indiana Code
IDEM	Indiana Department of Environmental Management
IDW	investigation-derived waste
LDR	Land Disposal Restriction
LQG	Large Quantity Generator
NAPL	non-aqueous phase liquids
NCP	National Contingency Plan
PAH	polycyclic aromatic hydrocarbon
PM	Project Manager
PPE	personal protective equipment
RCRA	Resource Conservation and Recovery Act
SHSP	Site Health and Safety Plan
SQG	Small Quantity Generator
TSDF	treatment, storage, and disposal facility
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
UHW	Uniform Hazardous Waste Manifest
USFWS	U.S. Fish and Wildlife Service
WBGCR	West Branch of the Grand Calumet River
WMP	Waste Management Plan

1. INTRODUCTION

The purpose of this Waste Management Plan (WMP) is to present the waste management practices and procedures to be followed for the types and quantities of waste expected to be generated during the field activities at the West Branch of the Grand Calumet River (WBGCR) Sediment Sampling Project. The WMP identifies waste management activities conducted during the storage and the preparation and/or disposal of waste, including: waste characterization, packaging, storage, and management while in storage. The transportation and disposal of waste will be conducted by Foster Wheeler Environmental Corporation (FWENC), with assistance by the U.S. Fish and Wildlife Service (USFWS). It is the responsibility of the Project Manager (PM) to verify that all project personnel are aware of the requirements stipulated in this WMP.

The WMP provides information on how wastes, including potentially hazardous wastes associated with project activities, will be managed and disposed. In addition, a secondary goal of this WMP is to ensure that waste minimization practices are followed, to the extent practical, to reduce the volume of waste that will be generated, stored, and removed from the site for disposal.

The WMP is also a primary component of the Foster Wheeler Environment Compliance Program, which includes on-site environmental compliance inspections. The WMP will be revised if the scope of this project or the applicable regulations change.

1.1 PROJECT DESCRIPTION

The WBGCR Sediment Sampling Project will characterize the surficial (biologically active layer) and deeper historical sediments through the collection of samples at the surface and up to 12 feet deep. In addition to sediment chemical and physical characterization, chronic toxicity will be conducted.

1.2 PROJECT WASTE DESCRIPTIONS

Project activities will involve the generation, management, and disposal of various waste streams, which may include investigation-derived waste (IDW) such as soil cuttings, personal protective equipment (PPE), sampling equipment, and decontamination water and solvents. Although they are not anticipated, small spills could result from refueling equipment, and would be managed as a waste stream.

2. REGULATORY DRIVERS AND GUIDANCE

In general, the State of Indiana has adopted the federal requirements for the transportation, accumulation, storage, and disposal of hazardous wastes. The following regulatory drivers are presented for federal and state requirements.

- United States Environmental Protection Agency (USEPA) 40 Code of Federal Regulations (CFR) Parts 261, 262, and 268 – Provides federal hazardous waste management regulations for classification of hazardous wastes, generator standards (including manifesting), and land disposal restriction notification requirements.
- United States Department of Transportation (USDOT) Regulations, 49 CFR 172, et seq. – Provides the requirements for packaging, marking, labeling, and transporting hazardous materials on public roadways.
- Indiana Department of Environmental Management (IDEM) Indiana Administrative Code 329 (IAC) 3.1 – Provides the state of Indiana hazardous waste management regulations and guidance for the classification and generation of hazardous wastes.
- IDEM 329 IAC 10-7.1, Indiana Code (IC) 13-20-7 and IC 13-20-7.5-1(b) – solid waste disposal regulations for industrial solid waste and disposal at municipal and subtitle D municipal solid waste landfills.

3. EXPECTED WASTE STREAMS AND QUANTITIES

3.1 CONTAMINANTS OF CONCERN

The primary contaminants of concern (COCs) are polycyclic aromatic hydrocarbons (PAHs) and heavy metals such as chromium and lead. Previous sampling data indicate that levels of these contaminants may exist above the Resource Conservation and Recovery Act (RCRA) levels in the sediments. Additionally, some of the COCs are known or suspected human carcinogens. The Site Health and Safety Plan (SHSP) addresses the measures that will be implemented to mitigate human exposure to these contaminants during this project. Each of the potential waste streams are detailed in Table 3-1.

3.2 PPE AND MISCELLANEOUS DEBRIS

Contaminated personal protective equipment and miscellaneous disposable sampling debris (used plastic scoops, bailers, glassware, etc.) will be generated during sampling activities. PPE and other miscellaneous waste not suspected of containing gross contamination will be bagged and disposed of in an approved on-site dumpster.

3.3 DECONTAMINATION WASTEWATERS

Liquid wastes (i.e., dewatering water and decontamination waters) will be potentially contaminated with metals and PAHs. The presence of any hazardous constituents in the wastewaters is expected to be diluted; therefore, the wastewaters are not expected to be classified as "HAZARDOUS WASTE". Therefore, the wastewaters are not likely to contain hazardous waste pursuant to the contained-in policy (i.e., environmental media that contain a listed hazardous waste are to be managed as a hazardous waste). Decontamination waters will be disposed of in the river.

Table 3-1. Project-specific Waste Stream Requirements

Waste Stream	Container	Estimated Quantity	Analytical Parameters for Characterization	Storage/Disposal Method
Used PPE, miscellaneous contaminated debris (disposable sampling equipment, contaminated plastic liners, etc.)	Sturdy plastic bags.	< 40 cubic feet	NA	Expected to be non-hazardous; waste may be disposed of in an approved solid waste dumpster on site.
Decontamination waste waters (contains water, detergents, contaminated sediments)	Sturdy 5-gallon buckets with secure lids for collection.	< 100 gallons	PCBs, VOCs, SVOCs, RCRA Metals, PAH, and TSS	<ul style="list-style-type: none"> Return to river.
Decontamination solvent wastes (methanol and hexane)	Sturdy 5-gallon buckets with secure lids for collection. Upon completion of the field work, decontamination solvents will be transferred to a DOT-approved, bung-top drum.	<10 gallons	NA	Store in designated “Less-than-90-Day” storage area ^{1/} . <ul style="list-style-type: none"> If hazardous, waste will be transported to a permitted TSDF for disposal. If non-hazardous, waste will be transported to a permitted TSDF for disposal. Alternatively, if weather permits, allow solvents to evaporate in open-air.
Contaminated excess sediment from coring and sampling activities	None required: scatter on site in vicinity of borehole.	< 1,000 pounds	NA	Expected to be non-hazardous; return to vicinity of borehole.
Spill cleanup materials (i.e., sorbent materials, soils, or sediments contaminated with gasoline, oil or chemical).	Sturdy plastic bags placed inside outer polyethylene or steel drum.	None anticipated; however, spills could occur.	PCBs, VOCs, SVOCs, RCRA Metals, PAH, and other analyses dependent on type of materials spilled.	Store in designated “Less-than-90-Day” storage area ^{2/} . <ul style="list-style-type: none"> If hazardous, waste will be transported to a permitted TSDF for disposal. If non-hazardous, dispose of at a Subtitle D landfill.
1/ USFWS is responsible for the transport and disposal of all waste. 2/ Must evaluate on a case-by-case basis for proper disposal based on substance or material spilled.				

3.4 DECONTAMINATION SOLVENTS

Decontamination solvents, such as methanol and hexane, may be generated by the decontamination of sampling equipment coated with non-aqueous phase liquids (NAPL). Decontamination solvents will be immediately contained and stored in a 5-gallon plastic bucket with a secure lid and will be marked as IDW Decontamination Solvents. The decontamination solvents will be manifested in preparation for transport to a permitted treatment, storage, and disposal facility (TSDF). FWENC will be responsible for the transportation and disposal of any accumulated decontamination solvents generated during this project. Alternatively, if weather permits, the containers of decontamination solvents will be allowed to evaporate in the open air.

3.5 EXCESS SEDIMENT SAMPLES

Excess sediment samples will be generated during the sample collection activities. Previous site sampling activities have indicated elevated levels of RCRA metals may be present within the sediments. Excess sediment will be returned to the vicinity of the borehole in order to prevent potential contamination of uncontaminated areas.

3.6 SPILL RESIDUES AND CLEAN UP MATERIALS

In the unlikely event of a spill at the site, spill cleanup measures will be implemented immediately, as outlined in the SHSP. There will not be large quantities of hazardous materials brought to the site or stored at the site by FWENC, however gasoline may be present for use in the equipment. Gasoline, in addition to being flammable contains benzene in levels that may render spill cleanup residues and materials to classify as hazardous waste for disposal. Any chemicals or fuels stored at the site will be stored in a manner that minimizes the potential for spills and an appropriate spill kit will be accessible at the site. Any spill cleanup waste will be containerized in a Department of Transportation (DOT) approved, 55-gallon, open-top drum. At the conclusion of sampling activities, it will be sampled and analyzed for disposal characterization. If hazardous, it will be disposed of at a permitted hazardous waste landfill. If the spill residue is non-hazardous, it will be disposed of at an approved Subtitle D landfill. FWENC will be responsible for the transportation and disposal of any accumulated spill residue generated during this project.

4. REGULATORY REQUIREMENTS

Regulatory requirements cover a variety of areas including, characterization, accumulation, storage, labeling, inspections, documentation, transportation, and disposal. These requirements are explained in the following subsections and are outlined in Tables 4-1 and 4-2.

4.1 WASTE CHARACTERIZATION

Prior to shipment off-site for disposal, each waste stream must be characterized appropriately. Characterization requirements are based on the COCs presented in the Statement of Work and are presented in Table 4-1. Prior to sampling for disposal characterization, the intended disposal facility for each waste stream should be contacted to determine if additional analyses will be required, because characterization requirements may vary from facility to facility.

In accordance with the applicable requirements for this site, the requirements of the federal and state (by incorporation of federal laws) hazardous waste generation, characterization, storage, treatment, and management regulations of 40 Code of Federal Regulations (CFR), Parts 261, 262, and 264, are applicable to the management of hazardous wastes. A summary of the key aspects of the waste management program is provided below.

4.1.1 Listed Hazardous Waste Determination

The first step in the RCRA hazardous waste characterization process is to evaluate contaminated media at the site(s) and determine whether it constitutes a “listed” RCRA waste. The preamble to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) states that “...it is often necessary to know the origin of the waste to determine whether it is a listed waste and that, if such documentation is lacking, the lead agency may assume it is not a listed waste” (55 Federal Regulations 8666, 8758 [1990]).

RCRA hazardous wastes that have been assigned EPA hazardous waste numbers (or codes) are listed in 40 CFR 261.30 through 261.33. The lists include hazardous waste codes beginning with the letters “F,” “K,” “P,” and “U.” Knowledge of the exact source of a waste is required for source-specific listed wastes (“K” waste codes). Some knowledge of the nature or source of the waste is required even for listed wastes from nonspecific sources,

such as spent solvents (“F” waste codes) or commercial chemical products (“P” and “U” waste codes). These listed RCRA hazardous wastes are restricted to commercially pure chemicals used in particular processes such as degreasing. P and U wastes cover only unused and unmixed commercial chemical products, particularly spilled or off-specification products. Not every waste containing a P or U chemical is a hazardous waste. There must be direct evidence of product use. In particular, all the following criteria must be met. The chemicals must be:

- discarded [as described in 40 CFR, Part 261.2(a)(2)]
- either off-specification commercial products or a commercially sold grade
- not used (soil contaminated with spilled unused wastes is a P or U waste)
- the sole active ingredient in a formulation

4.1.2 Characteristic Hazardous Waste Determination

Hazardous waste characteristics, as defined in 40 CFR, Parts 261.21 through 261.24, are commonly referred to as ignitability, corrosivity, reactivity, and toxicity. A waste that exhibits a characteristic is assigned a hazardous waste code beginning with the letter “D.” Waste characteristics can be measured by an available standardized test method or be reasonably classified by generators of waste based on their knowledge of the waste provided that the waste has already been reliably tested or if there is documentation of chemicals used.

4.2 HAZARDOUS WASTE ACCUMULATION

40 CFR Part 262 regulates the generation and accumulation of RCRA hazardous wastes. Requirements for accumulation include the following.

- Wastes will be labeled accordingly (Section 4.4), contained within DOT approved 55-gallon drums and situated within a pre-designated and properly designed hazardous waste storage area (Section 4.3).
- Each hazardous waste container must be kept closed, unless waste is being actively poured into the drum.
- Hazardous wastes may be stored on site for less than 90 days. The start of the 90-day period begins on the first day that waste is placed into the drum. Prior to the end of the 90-day period, the wastes must be transported off site.

4.3 HAZARDOUS WASTE STORAGE

40 CFR Part 262 also regulates the storage of Hazardous waste. Requirements for storage include that all hazardous wastes must be stored within a designated hazardous waste storage area (less than 90-day area). The requirements for the hazardous waste storage area institute measures and controls to help prevent harm to human health or the environment. They include the following:

- All liquid wastes must be stored within secondary containment.
- Weekly inspections of the hazardous waste storage area must be documented and conducted (Section 4.4).
- A sign with the legend, “Danger Hazardous Waste Area – Unauthorized Personnel Keep Out” (written in English and Spanish), will be posted at each waste storage area in sufficient numbers to be seen from any approach. The signs will be legible from a distance of at least 25 feet.
- Aisle space will be maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.
- The following emergency equipment will be located or available to personnel during active waste management activities at each accumulation area:
 - A device, such as a telephone or a hand-held two-way radio, capable of summoning emergency assistance will be available.
 - Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment will be available.
 - Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems will be available.
 - A spill response kit for minor spills. The kit will include a shovel, adsorbent pads, and/or “kitty litter”, and a collection container.

- Containers of hazardous wastes containing free liquids have stringent secondary containment requirements. These requirements include:
 - A base free of cracks or gaps and sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
 - The base will be sloped or the containment system will be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation. Alternatively, the containers may be elevated on pallets to prevent contact with accumulated liquids.
 - The containment system will have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater, plus the maximum rainfall from a 25-year, 24-hour storm event.
 - Spilled or leaked waste and accumulated precipitation will be removed from the sump or collection area in a timely manner to prevent overflow of the collection system.

4.4 CONTAINER LABELING

Containers of potentially hazardous waste will be labeled with indelible ink with the following information: source and location, contents and quantity, potential health, safety, and environmental hazards, accumulation start date, date container was sampled, parameters analyzed for, and the words “Analysis Pending – Potentially Hazardous.” If containers are determined to contain non-hazardous waste they will be labeled accordingly. If containers are determined to contain hazardous waste they will immediately be labeled with a completed “HAZARDOUS WASTE” label, which will include the following:

- EPA Identification Number of the generator (USFWS)
- Name and address of the generator (USFWS)
- EPA waste code
- DOT shipping name
- Description of contents
- Date of generation (date that the first drop of waste was placed in container)

Table 4-1 lists the Non-Hazardous Waste Generator requirements.

Table 4-1. Non-Hazardous Waste Generator Requirements

Regulatory Standard	Requirements
Solid Waste Determination	Sediments and IDW that are not classified as hazardous waste will be managed as solid waste. Solid waste must be managed in accordance with state, federal, and local solid waste regulations.
EPA Identification Number	No EPA Identification Number is needed.
Packaging	Packaging must be sturdy and designed to prevent the release of solid waste during storage and transport.
Labeling	<u>Non-hazardous waste labels</u> – should be affixed to each container, or the container should be marked with the contents, and “Non-Hazardous” should be clearly identified.
Placarding	Not applicable.
Bill of Lading	A bill of lading detailing the name and addresses of the generator, transporter, and disposal facility, and the weight and description of the contents should be completed by the shipper prior to the off-site shipment of material unless self-transported and disposed of. Shipping (transport and disposal will be arranged by FWENC.
Accumulation Time	Not applicable

4.5 WASTE MANAGEMENT INSPECTION AND DOCUMENTATION PROGRAM

This section presents the waste inspection procedures and documentation program to be employed during the project field activities.

4.5.1 Inspections

While all waste accumulation areas will be informally inspected on a daily basis, formal inspections of all container accumulation areas will be conducted and recorded, at least weekly, in accordance with 40 CFR, Part 264, Subpart I. The Site Supervisor or his designee will conduct inspections. Inspections will be logged in a field notebook, and a weekly inspection checklist will be completed. The container storage area(s) will be inspected to ensure the following:

- Containers are in good condition. If a container is not in good condition or appears to be leaking, the waste will be transferred to another container.
- Containers are made of materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored.

- Containers are closed at all times, except when adding or removing waste.
- Containers are labeled appropriately

4.5.2 Documentation

Documentation requirements apply to all waste managed during project activities. Field records will be kept of all waste generation activities. All pages of the field data record log will be signed and dated by the supervising field leader who is entering the data. In addition, the following information will be recorded in the log:

- Description of waste generating activities
- Location of waste generation (including depth, if applicable)
- Type and volume of waste
- Date and time of generation
- Description of any waste sampling
- Name of person recording information
- Name of field manager at time of generation

In addition to the field log, a separate inventory of waste containers will be maintained for submittal to the USFWS.

4.5.3 Waste Manifests and Land Disposal Restriction (LDR) Certification

All hazardous waste transported from the site will be accompanied by a Hazardous Waste Manifest. Effective January 1, 2001, as a result of the passing of Senate Enrolled Act 511, the State of Indiana no longer requires the use of an Indiana State Hazardous Manifest. If the waste will be shipped to an out-of-state TSDF, the generator must use the destination state's manifest. If the destination state does not require the use of a state hazardous waste manifest or the waste will be disposed of within the state of Indiana, the generator must use a Federal Uniform Hazardous Waste Manifest. In addition, generators and TSDFs are no longer required to submit copies of the individual manifests to IDEM. Instead, an annual hazardous waste manifest summary report is submitted to IDEM. If a non-hazardous waste will be transported off-site for disposal, a Non-Hazardous Waste Manifest will be prepared.

USFWS personnel will be responsible for reviewing and signing all waste documentation, including waste profiles, manifests, and Land Disposal Restriction (LDR) notifications (manifest packages). Prior to signing the manifest, the designated USFW official will ensure that pre-transport requirements of packaging, labeling, marking, and placarding are met according to 40 CFR, Parts 262.30 through 262.33, and 49 CFR, Parts 100 through 178.

USFWS will receive one copy of the manifest; the remaining copies will be given to the transporter. The manifest will be returned to the USFWS's signatory official for their recordkeeping requirements. Copies of all manifests for waste generated at the site will be kept in a compliance file within the Foster Wheeler Environmental project files. (The PM will provide the USFWS with the generator's copies of the manifest.)

An LDR form will accompany the shipment of hazardous waste to the TSDF. The TSDF will be notified prior to the waste being sent. The following items must accompany the notification and are included in the waste characterization profile:

- EPA Hazardous Waste Generator identification number for the site
- Manifest number, including state disposal application number
- Waste analysis data
- Corresponding concentration-based or technology-based treatment standards will be identified if the waste is also land disposal restricted

Table 4-2 lists the Hazardous Waste Generator requirements.

RCRA recordkeeping requirements per 40 CFR, Parts 262.20 through 262.44, including retention of signed copies of manifests from the designated facility that received the waste will be adhered to. Additionally, exception reporting information will be submitted, as Necessary, according to 40 CFR, Parts 262.41 and 262.42.

4.6 WASTE TRANSPORTATION

FWENC is responsible for shipping hazardous waste off-site with approval by USFWS. Waste is not expected to be classified as Hazardous Waste, however, all required analyses and documentation will be completed and forwarded to USFWS to assist in determining transportation requirements. Under no circumstances will FWENC personnel sign hazardous waste manifests.

Table 4-2. Hazardous Waste Generator Requirements

Regulatory Standard	Requirements
Hazardous Waste Determination and Generator Status	<ul style="list-style-type: none"> • Determine whether you have any hazardous wastes. • Determine the generator status (Large, Small or Conditionally Exempt Small Quantity Generator).
EPA Identification Number	<ul style="list-style-type: none"> • EPA ID No. is needed if waste is hazardous (unless Conditionally Exempt). • Coordination with the generator and TSDf's will be established for signatures and approvals for waste disposal by FWENC.
Packaging	<ul style="list-style-type: none"> • Hazardous wastes are to be placed in new condition USDOT Type 1A1 or 1A2 steel drums prior to transport off site. • All drums must remain closed at all times unless actively adding waste to the drum.
Marking and Labeling	<ul style="list-style-type: none"> • <u>Hazardous waste labels</u> – must be properly filled out and affixed to each container of hazardous waste prior to shipment off site. • The words “HAZARDOUS WASTE” must be written conspicuously on the container when the first quantity of hazardous waste is placed in the drum. • The primary hazard or suspected contaminants should be marked on the container (i.e., sediment containing PAHs and heavy metals). • <u>USDOT Labels</u> – must be affixed to each container containing a hazardous waste before it is shipped. USDOT labels are pre-printed, designating the hazard class of the material. • <u>USDOT Marking</u> – The container must be marked with the proper USDOT shipping name, identification number (may be entered on hazardous waste label) and shipper's name and address.
Placarding	<ul style="list-style-type: none"> • Placards declaring the USDOT hazard class of the waste must be provided to the transporter of the waste by the shipper if the waste class quantity for placarding is established. (Not expected)
Manifesting	<ul style="list-style-type: none"> • All hazardous wastes must be accompanied by a Federal Uniform Hazardous Waste Manifest (UHW) when shipped off site unless declared Conditionally Exempt.

Table 4-2. Hazardous Waste Generator Requirements (continued)

Regulatory Standard	Requirements
Accumulation/On-site Storage Time	<ul style="list-style-type: none"> • Large Quantity Generators (LQG) – Wastes may be stored on site for less than 90 days. • Small Quantity Generator (SQG) – 180 days maximum or 270 days if TSDF is located more than 200 miles away (see below for additional requirements for SQGs). • If SQG maximum quantities are exceeded, the maximum on-site storage time is 89 days.
Small Quantity Generator Requirements	<ul style="list-style-type: none"> • Total quantity of waste accumulated on-site can never exceed 2,200 pounds in a calendar month. • Post the following information near the closest two-way communication source: <ul style="list-style-type: none"> – Name and telephone number of the emergency coordinator and state and federal spill notification agencies (see SHSP). – Location of fire extinguishers (if flammable waste is stored) and spill control material. – Fire Department telephone number – 911.
Hazardous Waste Storage Area Container Requirements	<ul style="list-style-type: none"> • Storage containers must be in good condition and be made of materials which are compatible with the waste being stored. • Containers must be kept closed except to add or remove waste and they must be managed to prevent leaking. • Containers must be inspected every week, looking for leaks or deterioration, and results of the inspection must be documented in a weekly inspection log. • Containers must be marked with the date on which the accumulation period began (when waste is first placed in the container). • Each container is labeled or marked clearly with the words “HAZARDOUS WASTE”. • Containers destined for off-site shipment must be labeled and marked in accordance with USDOT requirements. • Liquid hazardous wastes must be stored within secondary containment. Unauthorized access must be prevented. • Hazardous wastes should be clearly segregated from non-hazardous wastes and materials.

Hazardous wastes sent off site for disposal or recycling will be done so in accordance with the DOT Hazardous Material Transportation regulations of 49 CFR, Parts 171 through 177, and 40 CFR, Part 262, Subpart B which involve packaging, placarding, labeling, and

manifesting requirements, and with appropriate LDR certification notices per 40 CFR, Part 268.

Material that does not exhibit one of the nine DOT hazard class characteristics (that is, explosives, gases, flammable/combustible liquids, flammable solids/spontaneously combustible materials/dangerous when wet materials, oxidizers and organic peroxides, toxic materials and infectious substances, radioactive materials, and corrosive materials) is not regulated under DOT rules for hazardous material transportation.

If material is suspected to be hazardous, it must be shipped under the appropriate hazard class. All hazardous waste will be transported under DOT hazardous material regulations. Each shipment of a suspected hazardous material will be properly classed using the Hazardous Materials Table in 49 CFR, Part 172.101.

4.7 WASTE DISPOSAL

FWENC will be responsible for waste disposal with approval by USFWS and will complete the documentation required for waste disposal. Wastes generated during the project may include RCRA and non-hazardous wastes manifested for transportation off-site for disposal or recycling. Table 3-1 lists wastes handling, sampling, and disposal requirements for wastes that will likely be generated during site activities. Each waste stream requiring disposal will be sampled and analyzed, as necessary, to ensure that it is properly characterized and profiled and meets the waste acceptance criteria and packaging requirements for the proposed TSDF prior to transport.

Hazardous waste will be disposed only at a hazardous waste disposal permitted for the disposal of the particular type of hazardous waste generated. Wastes disposed of off-site will be sent to RCRA Subtitle C or RCRA Subtitle D facilities.

4.8 WASTE MINIMIZATION

To minimize the volume of waste, the following best management practices will be followed:

- Waste materials will not be contaminated unnecessarily.
- Work will be planned ahead.
- Materials may be stored in large containers, but the smallest reasonable container will be used to transport the material to the location where it is needed.

- Cleaning and extra sampling supplies will be maintained outside any potentially contaminated area to keep them clean and to minimize additional waste generation.
- Mixing of detergents or decontamination solutions will be performed outside potentially contaminated areas.
- Drop cloths or other absorbent material will be used to contain small spills or leaks.
- Contaminated materials will not be placed with clean materials.
- Wooden pallets inside the exclusion zone will be covered with plastic.
- Material and equipment will be decontaminated and reused when practical.
- Volume reduction techniques will be used when practicable.
- Waste containers will be verified to ensure they are solidly packed to minimize the number of containers.
- Only the size waste containers adequate to contain the volume of waste generated will be used.

Less hazardous substances will be used whenever possible (that is, only the volume of standard solutions needed for testing will be brought; minimal amounts of decontamination water and solvent rinses will be used).

5. UPDATING THE WASTE MANAGEMENT PLAN

The WMP will be updated as changes in site activities or changes in applicable regulations occur.